

Naval Petroleum & Oil Shale Reserves

Naval Petroleum & Oil Shale Reserves

Naval Petroleum and Oil Shale Reserves

Proposed Appropriation Language

For expenses necessary to carry out naval petroleum and oil shale reserve activities, \$20,000,000 [\$18,102,000], to remain available until expended: Provided, That, notwithstanding any other provision of law, unobligated funds remaining from prior years shall be available for all naval petroleum and oil shale reserve activities.

Explanation of Change

The change reflects an increase in environmental restoration activities.

Naval Petroleum and Oil Shale Reserves

Office of Fossil Energy

Overview

Appropriation Summary by Program

(dollars in thousands)

	FY 2003 Comparable Appropriation	FY 2004 Comparable Appropriation	FY 2005 Base	FY 2005 Request	FY 2005 Request vs Base	
					\$ Change	% Change
Naval Petroleum and Oil Shale Reserves.....	17,715	17,995	18,147	20,000	+1,853	+10%

Preface

Since the NPOSR no longer served the national defense purpose envisioned in the early 1900s, the National Defense Authorization Act for Fiscal Year 1996 (P.L. 104-106) required the sale of the Government's interest in NPR-1. To comply with this requirement, the Elk Hills field in California was sold to Occidental Petroleum Corporation in 1998. Subsequently, the Department transferred two of the Naval Oil Shale Reserves (NOSR-1 and NOSR-3), both in Colorado to the Department of the Interior's Bureau of Land Management. In January 2000, the Department also returned the NOSR-2 site to the Northern Ute Indian Tribe.

Mission

Following the sale of Elk Hills and the transfer of the oil shale reserves, DOE retains two Naval Petroleum Reserve properties:

The Naval Petroleum Reserve 3 in Wyoming (Teapot Dome field) - A stripper well oil field that the Department will maintain until it reaches its economic production limit. Environmental remediation efforts are underway, and the field is being used as the Rocky Mountain Oilfield Testing Center (RMOTC). Activities performed at RMOTC include field testing of new technology, evaluation of new equipment, and demonstration of new processes.

The Buena Vista Hills Naval Petroleum Reserve 2 in California - A checkerboard pattern of government and privately owned tracts adjacent to the Elk Hills field. Of the 30,181 acres, 10,446 acres are owned by the government and leased by private oil companies. Revenues from 1976 through 2001 totaled \$62 million. Discussions have begun with the Department of the Interior on transfer of this asset.

Benefits

The Department continues activities to finalize its Elk Hills equity interests with ChevronTexaco, co-owner of Elk Hills. Under the *Equity Redetermination Process Agreement*, the ASFE is to impartially determine final equity shares between ChevronTexaco and the Department of Energy. The final equity determinations could result in a combined financial impact worth several hundred million dollars for the total of all four of the NPR-1 producing zones. Financial settlements will occur after final decisions have been made for all four zones, by the end of FY 2007.

The RMOTC program at NPR-3 continues to support the Administration's goal to develop new/alternative energy sources and energy efficiency technologies for use in the petroleum industry. RMOTC offers a place to perform hands-on, applied research (testing and demonstration) that is tailored to the U.S. independent oil producers – helping speed new technology to the market place.

Significant Program Shifts

To meet the deadline set in the Authorization Act, it was necessary for the Department to commit to a number of activities after closing the sale of the Elk Hills site. The commitments were formalized in several legal agreements. The program continues work to close the remaining environmental findings, as required by the agreement between DOE and the California Department of Toxic Substance Control (DTSC). A human health and an ecological Risk Assessment on the 131 DTSC areas of concern are primary activities supported by this budget. Following completion of the Risk Assessments, the program will complete appropriate Corrective Action Studies to determine cleanup in the field. Completion of Risk Assessments and Corrective Action Studies is scheduled for FY 2009.

Since 1996, the program's primary focus has been to operate NPR-3 in Wyoming to its economic limit, and pursue a phased environmental restoration and equipment salvage program at those parts of NPR-3 that are no longer needed for operation. Initial estimates projected that the field would be shut-in by 2003, however, the favorable oil prices and application of new oil field strategies and technologies have arrested the decline in production. It is expected that profitable operations at NPR-3 will continue.

Naval Petroleum and Oil Shale Reserves

Detailed Funding Table

(dollars in thousands)			
	FY 2003	FY 2004	FY 2005
Naval Petroleum and Oil Shale Reserves (NPOSR)			
Production Operations	2,550	3,457	3,300
Environmental Restoration	2,279	3,279	5,207
Rocky Mountain Oilfield Testing Center	3,000	2,963	2,169
Subtotal, Production & Operations	7,829	9,699	10,676
Program Direction	3,511	4,073	5,342
Equity	3,900	2,223	1,750
Business Management and Support	2,475	2,000	2,232
Subtotal, Management	9,886	8,296	9,324
TOTAL, NPOSR	17,715	17,995	20,000

Naval Petroleum and Oil Shale Reserves

Funding by Site by Program

	(dollars in thousands)				
	FY 2003	FY 2004	FY 2005	\$Change	%Change
Naval Petroleum & Oil Shale Reserves					
NPR California	4,229	5,050	6,347	+1,297	+26%
NPOSR – Colorado, Utah, Wyoming	8,337	9,632	10,225	+593	+6%
Washington Headquarters	5,149	3,313	3,428	+115	+3
Total, NPOSR	17,715	17,995	20,000	+2,005	+11%

Site Descriptions

NPR – California

The NPR-California field office, located in Bakersfield, California, is responsible for completing closeout activities, environmental remediation, and cultural resource assessment from the sale of the Elk Hills site.

NPOSR -Colorado, Utah and Wyoming

The NPOSR – Colorado, Utah, and Wyoming (CUW), located in Casper, Wyoming supports activities to produce NPR-3 at the maximum efficient rate. This site is co-located with the Rocky Mountain Oilfield Testing Center - a testing and demonstration facility.

Washington Headquarters

The headquarters office located in Washington, DC supports the independent evaluation and recommendation of final equity for Elk Hills as well as the geologic, petrophysical and reservoir engineering services required to prepare and support the Government's equity position before an Independent Petroleum Engineer and the Assistant Secretary for Fossil Energy (ASFE). Program Direction funding for the NPR Headquarters staff (10 FTEs) in Washington, DC is also included in this category.

Naval Petroleum and Oil Shale Reserves

Funding Profile by Subprogram

(dollars in thousands)

	FY 2003 Comparable Appropriation	FY 2004 Comparable Appropriation	FY 2005 Base	FY 2005 Request	FY 2005 Request vs Base	
					\$ Change	% Change
Production & Operations						
Production						
Operations	2,550	3,457	3,457	3,300	-167	-5%
Environmental						
Restoration	2,279	3,279	3,279	5,207	+1,928	+1%
Rocky Mountain						
Oilfield Testing						
Center	3,000	2,963	2,963	2,169	-794	-27%
Total, Production & Operations	7,829	9,699	9,699	10,676	+977	+10%

Public Law Authorization:

P. L. 94-258, Naval Petroleum Reserves Production Act of 1976

Mission

The mission of the Production and Operations subprogram includes:

- Environmental remediation and cultural resource activities required as a result of the Elk Hills sale agreement. To meet the deadline set in the Authorization Act, it was necessary for the Department to commit to a number of activities after closing the sale. The commitments were formalized in several legal agreements between DOE, Occidental, Chevron, and the State of California. Activities include completing environmental and archaeological work; assessing sites where remediation was not completed before the sale; and concluding any lawsuits related to the operation of Elk Hills that had been brought by third parties against the Government and/or its contractors.
- Ongoing conventional oil field management and operations at NPR-3. Since 1996, the program's primary focus has been to operate NPR-3 in Wyoming to its economic limit, and pursue a phased environmental restoration and equipment salvage program at those parts of NPR-3 that are no longer needed for operation. Initial estimates projected that the field would be shut-in by 2003, however, the favorable oil prices and application of new oil field strategies and technologies have arrested the decline in production. It is expected that profitable operations at NPR-3 will continue.

- Field testing and demonstration of upstream and environmental products at the Rocky Mountain Oilfield Testing Center (RMOTC), which is co-located with NPR-3.
- Management of leases associated with Naval Petroleum Reserve 2 in California (Buena Vista Hills) until transfer to the Department of the Interior and subsequent environmental remediation activities.

Benefits

Revenue from production and operation of the Naval Petroleum Reserve 3 in Wyoming (Teapot Dome field) is estimated to be over \$5 million dollars in FY 2005. Associated revenues from the NPR-2 leases are estimated at approximately \$2 million dollars.

The RMOTC program at NPR-3 continues to support the Administration's goal to develop new/alternative energy sources and energy efficiency technologies for use in the petroleum industry. RMOTC offers a place to perform hands-on, applied research (testing and demonstration) that is tailored to the U.S. independent oil producers – helping speed new technology to the market place.

Detailed Justification

	(dollars in thousands)		
	FY 2003	FY 2004	FY 2005
Production and Operations	7,829	9,699	10,676
• Production Operations	2,550	3,457	3,300

Continue to maintain and produce approximately 670 stripper wells at NPR-3 (expected to produce 440 barrels of oil and 1,400 gallons of natural gas liquids per day). Includes routine O&M activities for production facilities, well maintenance, electricity, utilities, buildings, roads, heavy field equipment, motor vehicles and capital projects where warranted.

FY2003 and FY2004 funding continued routine O&M activities at NPR-3 for production facilities, well maintenance, electricity and utilities, buildings, roads, heavy field equipment, motor vehicles and capital projects to be undertaken provided oil prices warrant such expenditures

• Environmental Restoration	2,279	3,279	5,207
-----------------------------------	-------	-------	-------

Continue Elk Hills environmental and archeological closeout activities. Continue work to clean close 3 inactive permitted landfills. Perform a human health and an ecological Risk Assessment on the 131 California Department of Toxic Substances Control (DTSC) areas of concern. Following completion of Risk Assessments, complete appropriate Corrective Action Studies to determine cleanup in the field. Completion of Risk Assessments and Corrective Action Studies is scheduled for FY 2009. Continue negotiations with ChevronTexaco on the disposition of sites

listed on Exhibit H of the Unit Plan Contract Termination Agreement. Continue restoration activities at NPR-3 for reservoirs that are no longer able to produce economically.

FY 2003 and FY 2004 funding continued efforts to document the results of cultural resource work scheduled for completion in FY 2004. Released information to the public and curated artifacts at a facility meeting Federal curation standards. Continued plugging and abandonment of uneconomic wells and closing surface facilities at NPR-3 that were no longer required to support production operations.

- Rocky Mountain Oilfield Testing Center 3,000 2,963 2,169

Continue field testing and demonstration of upstream petroleum and environmental products to support the Administration's goal to develop new/alternative energy sources and energy efficiency technologies for use in the petroleum industry. Includes tech transfer, business development and small instrumentation activities, as well as cost share dollars for small, short timeframe tests.

FY 2003 and FY 2004 funding supported RMOTC activities such as geothermal well drilling and geothermal electricity production using heat mining, produced water bioremediation, single entry inclined reservoir drainage concepts and other drilling concepts that will reduce impacts on the environment.

Total, Production and Operations	7,829	9,699	10,676
---	--------------	--------------	---------------

Explanation of Funding Changes

FY 2005 vs. FY 2004 (\$000)

Production and Operations

Increase in environmental remediation activities offset by decrease in NPR-3 facilities maintenance..... +1,928

Decrease in RMOTC field testing and demonstration projects -794

Total Funding Change, Production and Operations +977

Naval Petroleum and Oil Shale Reserves

Funding Profile by Subprogram

(dollars in thousands)

	FY 2003 Comparable Appropriation	FY 2004 Comparable Appropriation	FY 2005 Base	FY 2005 Request	FY 2005 Request vs Base	
					\$ Change	% Change
Management						
Program						
Direction	3,511	4,073	4,225	5,342	+1,117	+26%
Equity	3,900	2,223	2,223	1,750	+473	+21%
Business						
Management						
& Support	2,475	2,000	2,000	2,232	+232	+12%
Total, Management	9,886	8,296	8,448	9,324	+876	+10%

Public Law Authorization:

P. L. 94-258, Naval Petroleum Reserves Production Act of 1976

Mission

The mission of the Management subprogram is to support business management activities for all active sites, NPR-1 closeout, and NPR-2 lease management. Support for the settlement of equity shares with ChevronTexaco, the minority owner of Elk Hills, is a major activity for which geologic, petrophysical and reservoir engineering services are required to prepare and support the Government's equity position before an Independent Petroleum Engineer and the Assistant Secretary for Fossil Energy (ASFE).

Benefits

The final equity determinations could result in a combined financial impact worth several hundred million dollars for the total of all four of the NPR-1 producing zones. Financial settlements will occur after final decisions have been made for all four zones, by the end of FY 2007.

Detailed Justification

(dollars in thousands)

	FY 2003	FY 2004	FY 2005
Management	9,886	8,296	9,324

- Program Direction 3,511 4,073 5,342

Provides salaries, travel, support services and other related expenses required for management and execution of the NPOSR program. Supports various activities including:

- Salaries and Benefits 3,263 3,835 3,906

Staff of 32 FTEs (11 at Headquarters and 21 in the field) performs policy and planning, equity determination, petroleum engineering, financial management, procurement, environment and safety, and administration of reimbursable work programs.

- Travel 125 238 240

Provides travel to assure the accomplishment of program mission. FY 2003 requirements were offset with available carryover. FY2004 and FY 2005 reflect full funding requirements.

- Support Services 50 0 226

Provide analytic support for policy decisions. FY 2003 and FY 2004 requirements were offset with available carryover. FY 2005 reflects full funding requirements.

- Other Related Expenses 73 0 970

Major elements are communications, utilities, building leases, supplies and materials. FY 2003 and FY 2004 requirements were offset with available carryover. FY 2005 reflects full funding requirements.

- Equity 3,900 2,223 1,750

The Dry Gas Zone, Carneros Zone and Stevens Zone are finalized. A provisional recommendation for the Shallow Oil Zone was issued by the independent petroleum engineer in May 2003. The final recommendation is not expected until early 2005. The process could take until 2007 for final ASFE decision.

FY2003 and FY2004 funding supported the independent petroleum engineer, legal support, and expert technical analysis/ consultation required to support the final Fossil Energy decision.

- Business Management & Support 2,475 2,000 2,232

Continue payments for post-employment medical and dental benefits to former Management & Operating (M&O) contractor employees. For NPR-2, ensure compliance of the 17 lease agreements expected to generate \$2.0 million in royalty revenues. Continue general operational and administrative support at the field sites.

Total, Management 9,886 8,296 9,324

Explanation of Funding Changes

FY 2005 vs. FY 2004 (\$000)

Management

Mandatory increase for Cost of Living adjustment and general pay raises +152

Increase in contract support for environmental restoration
& closeout activities offset by decrease in equity finalization support +876

Total Funding Change, Management +1,028

Program Direction

Funding Profile by Category

(dollars in thousands/whole FTEs)

	FY 2003	FY 2004	FY 2005	\$ Change	% Change
NPR - California					
Salaries and Benefits.....	706	727	756	+29	+3.9%
Travel.....	28	28	28	+0	+0.0%
Support Services	0	0	0	0	+0.0%
Other Related Expenses	0	0	257	+257	+100.0%
Total, NPR - California.....	734	755	1,041	+286	+37.9%
Full Time Equivalents	4	4	4	+0	+0.0%
NPOSr – Colorado, Utah, Wyoming					
Salaries and Benefits.....	1,429	1,844	1,950	+106	+5.8%
Travel.....	49	160	160	+0	+0.0%
Support Services	0	0	0	+0	+0.0%
Other Related Expenses	50	0	513	+513	+100.0%
Total, NPOSr – Colorado, Utah, Wyoming	1,528	2,004	2,623	+619	+30.9%
Full Time Equivalents	15	17	17	0	+0.0%
Headquarters					
Salaries and Benefits.....	1,128	1,264	1,200	-64	-5.1%
Travel.....	48	50	52	+2	+3.8%
Support Services	50	0	226	+226	+100.0%
Other Related Expenses	23	0	200	+200	+100.0%
Total, Headquarters	1,249	1,314	1,678	+364	+27.7%
Full Time Equivalents	10	11	11	0	0.0%
Total Program Direction					
Salaries and Benefits.....	3,263	3,835	3,906	+71	+1.9%
Travel.....	125	238	240	+2	+0.8%
Support Services	50	0	226	+226	+100.0%
Other Related Expenses	73	0	970	+970	+100.0%
Total Program Direction	3,511	4,073	5,342	+1,269	+31%
Total Full Time Equivalents	29	32	32	0	0%

**NAVAL PETROLEUM AND OIL SHALE RESERVES
PROJECTED FEDERAL REVENUES
(Dollars in thousands)**

	FY 2003			FY 2004			FY 2005		
Naval Petroleum Reserve No. 3									
	Production	Price	Revenues (\$000)	Production	Price	Revenues (\$000)	Production	Price	Revenues (\$000)
Crude Oil	525 BOPD	\$26.00	\$4,982	466 BOPD	\$26.00	\$4,420	440 BOPD	\$30.00	\$4,796
Liquid Products	1,400 GPD	\$.40/gal	\$204	1,400 GPD	\$.40/gal	\$204	1,400 GPD	\$.60/gal	\$307
Total NPR-3			\$5,186			\$4,932			\$5,103
Naval Petroleum Reserve Number 2 -- Royalties from 17 Lease Agreements									
	Production	Price	Revenues (\$000)	Production	Price	Revenues (\$000)	Production	Price	Revenues (\$000)
Crude Oil	161 BOPD	26.65	\$1,363	162 BOPD	\$24.00	\$1,416	168 BOPD	\$24.00	\$1,470
Natural Gas	630 MCF/D	3.75	\$815	660 MCF/D	\$2.30	\$534	660 MCF/D	\$2.30	\$554
Liquid Products	404 GPD	\$.25/gal	\$39	408 GPD	\$.30/gal	\$45	424 GPD	\$.30/gal	\$46
Total NPR-2			\$2,217			\$1,995			\$2,070
TOTAL NPOSR REVENUE			\$7,403			\$6,927			\$7,173

**NAVAL PETROLEUM AND OIL SHALE RESERVES
PROJECTED FEDERAL REVENUES
(Dollars in thousands)**

	FY 2006			FY 2007			FY 2008		
Naval Petroleum Reserve No. 3									
	Production	Price	Revenues (\$000)	Production	Price	Revenues (\$000)	Production	Price	Revenues (\$000)
Crude Oil	395 BOPD	\$31.00	\$4,469	353 BOPD	\$32.00	\$4,123	317 BOPD	\$34.00	\$3,934
Liquid Products	1,400 GPD	\$.65/gal	\$332	1,400 GPD	\$.70/gal	\$358	1,400 GPD	\$.75/gal	\$383
Total NPR-3			\$4,801			\$4,481			\$4,317
Naval Petroleum Reserve Number 2 (Royalties from 17 Lease Agreements)									
	Production	Price	Revenues (\$000)	Production	Price	Revenues (\$000)	Production	Price	Revenues (\$000)
Crude Oil	174 BOPD	\$24.00	\$1,521	180 BOPD	\$24.00	\$1,574	180 BOPD	\$25.00	\$1,643
Natural Gas	683MCF/D	\$2.30	\$573	707 MCF/D	\$2.30	\$593	707 MCF/D	\$2.40	\$619
Liquid Products	439 GPD	\$.30/gal	\$48	456 GPD	\$.30/gal	\$50	456 GPD	\$.31/gal	\$52
Total NPR-2			\$2,142			\$2,217			\$2,314
TOTAL NPOSR REVENUE			\$6,943			\$6,698			\$6,631

